SIEMENS

Data sheet 3RT2037-3NB30



power contactor, AC-3e/AC-3, 65 A, 30 kW / 400 V, 3-pole, 20-33 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, size: S2,

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	11.4 W
 at AC in hot operating state per pole 	3.8 W
 without load current share typical 	1 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7.7g / 5 ms, 4.5g / 10 ms
• at DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at AC	12g / 5 ms, 7g / 10 ms
• at DC	12g / 5 ms, 7g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Melamine - 108-78-1
Weight	1.13 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	

	05
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	107 kg
global warming potential [CO2 eq] during manufacturing	5.88 kg
global warming potential [CO2 eq] during operation	102 kg
global warming potential [CO2 eq] after end of life	-0.988 kg
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	690 V
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	80 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	80 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	70 A
• at AC-3	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-3e	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
 at AC-4 at 400 V rated value 	55 A
• at AC-5a up to 690 V rated value	70.4 A
at AC-5b up to 400 V rated value	53.9 A
• at AC-6a	F0.0.4
— up to 230 V for current peak value n=20 rated value	56.9 A
— up to 400 V for current peak value n=20 rated value	56.9 A
— up to 500 V for current peak value n=20 rated value	56.9 A
— up to 690 V for current peak value n=20 rated valueat AC-6a	47 A
 up to 230 V for current peak value n=30 rated value 	38 A
— up to 400 V for current peak value n=30 rated value	38 A
— up to 500 V for current peak value n=30 rated value	38 A
— up to 690 V for current peak value n=30 rated value	38 A
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm²
operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value	28 A
at 400 V rated value at 690 V rated value	22 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	23 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	55 A

— at 60 V rated value	45 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	1.474
— at 24 V rated value	35 A
— at 60 V rated value	6 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 A
— at 600 V rated value	0.06 A
with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 60 V rated value	45 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
 at AC-2 at 400 V rated value 	30 kW
• at AC-3	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
• at AC-3e	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	14.7 kW
at 690 V rated value	20 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	22.6 kVA
 up to 400 V for current peak value n=20 rated value 	39.4 kVA
• up to 500 V for current peak value n=20 rated value	49.2 kVA
• up to 690 V for current peak value n=20 rated value	56.1 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	15.1 kVA
• up to 400 V for current peak value n=30 rated value	26.2 kVA
• up to 500 V for current peak value n=30 rated value	32.8 kVA
 up to 690 V for current peak value n=30 rated value 	45.3 kVA
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	1 055 A; Use minimum cross-section acc. to AC-1 rated value

 limited to 5 s switching at zero current maximum 	730 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	520 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	336 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	272 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	1 500 1/h
• at DC	1 500 1/h
operating frequency	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	700 1/h
• at AC-3e	
— maximum	700 1/h
at AC-4 maximum	200 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
at 50 Hz rated value	20 33 V
at 60 Hz rated value	20 33 V
control supply voltage at DC rated value	20 33 V
operating range factor control supply voltage rated value of	
magnet coil at DC	
initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
design of the surge suppressor	with varistor
inrush current peak	3 A
duration of inrush current peak	50 µs
locked-rotor current mean value	1 A
locked-rotor current peak	2.6 A
duration of locked-rotor current	230 ms
holding current mean value	40 mA
apparent pick-up power of magnet coil at AC	
● at 50 Hz	40 VA
● at 60 Hz	40 VA
apparent holding power	
 at minimum rated control supply voltage at DC 	2 VA
at maximum rated control supply voltage at DC	2 VA
apparent holding power	
at minimum rated control supply voltage at AC	
— at 50 Hz	2 VA
— at 60 Hz	2 VA
at maximum rated control supply voltage at AC	
— at 50 Hz	2 VA
— at 60 Hz	2 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	2 VA
• at 60 Hz	2 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.95
• at 60 Hz	0.95
closing power of magnet coil at DC	23 W
holding power of magnet coil at DC	1 W
closing delay	
• at AC	35 110 ms
• at DC	35 110 ms
opening delay	20 FF ma
• at AC	30 55 ms

with type of coordination 2 required Graph of properties and the auxiliary switch required For short-circuit protection of the auxiliary switch required graph of the auxil	• at DC	30 55 ms
Austilary circuit umber of NC contacts for auxiliary contacts instantaneous contact c	arcing time	10 20 ms
umber of NC contacts for auxiliary contacts instantaneous contact contact of cauxiliary contacts instantaneous contact contact of auxiliary contacts instantaneous contact con	control version of the switch operating mechanism	Standard A1 - A2
umber of NC contacts for auxiliary contacts instantaneous contact contact of cauxiliary contacts instantaneous contact contact of auxiliary contacts instantaneous contact con	Auxiliary circuit	
contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 600 V rated value • at 60 V rated value • at 100 V rated value • at 60 V rated value • brown at 60 V rated value • at 60 V rated value • brown at 60 V rated value • at 60 V rated value • brown at 60 V rated	number of NC contacts for auxiliary contacts instantaneous	1
10		1
• at 230 V rated value	operational current at AC-12 maximum	10 A
and 400 V rated value	operational current at AC-15	
1	at 230 V rated value	10 A
• at 690 V rated value	at 400 V rated value	3 A
Operational current at DC-12	at 500 V rated value	2 A
all 24 V rated value	• at 690 V rated value	1 A
• at 48 V rated value	operational current at DC-12	
• at 60 V rated value • at 110 V rated value • at 120 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 80 V rated value • at 100 V rated value • at 100 V rated value • at 100 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 200 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 800 V rated value • bo hp • at 20000 V rated value • bo hp • at 576600 V rated value • bo hp • at 576600 V rated value • bo hp • at 576600 V rated value • bo hp • at 576600 V rated value • bo hp • at 576600 V rated value • bo hp • at 576600 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp • at 6760 V rated value • bo hp •	• at 24 V rated value	10 A
• at 110 V rated value	• at 48 V rated value	6 A
• at 125 V rated value	at 60 V rated value	6 A
• at 220 V rated value	at 110 V rated value	3 A
operational current at DC-13 **at 24 V rated value** **at 24 V rated value** **at 48 V rated value** **at 60 V rated value** **at 125 V rated value** **at 125 V rated value** **at 220 V rated value** **at 220 V rated value** **at 60 V rated value** **at 600 V rated value**	at 125 V rated value	2 A
a ta 24 V rated value 10 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A	at 220 V rated value	1 A
• at 24 V rated value 2 A • at 48 V rated value 2 A • at 60 V rated value 1 A • at 60 V rated value 0.9 A • at 125 V rated value 0.9 A • at 220 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UUCSA ratings UUCSA ratings UUCSA ratings UUCSA ratings In 1910 ad current (FLA) for 3-phase AC motor • at 480 V rated value 65 A • at 600 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor — at 1101/120 V rated value 5 hp — at 230 V rated value 10 hp • for 3-phase AC motor — at 200/208 V rated value 5 hp — at 200/208 V rated value 50 hp — at 200/208 V rated value 50 hp — at 200/208 V rated value 50 hp — at 250/208 V rated value 50 hp — at 250/208 V rated value 50 hp — at 250/500 V rated value 50 hp — at 250/500 V rated value 50 hp — at 2575/600 V rated value 50 hp — at 575/600 V rated value 60 hp — at 575/600 V rated value 60 hp — at	at 600 V rated value	0.15 A
at 48 V rated value at 60 V rated value at 61 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 220 V rated value at 230 V rated value at 260 V rated value at 600 V rated value be at 600 V rated value at 600 V rated value be at 600 V rated value at 600 V rated value be for single-phase AC motor at 200 V rated value at 200 V rated value be for 3-phase AC motor at 200 V rated value at 200 V rated value be for 3-phase AC motor at 200 V rated value at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 3-phase AC motor at 200 V rated value be for 400 V rated value be for 500 V rated value be for 500 V rated value be for 500 V rated value be for 600 V rated value be f	operational current at DC-13	
• at 60 V rated value 1 A • at 110 V rated value 1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A Contact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings Full-load current (FLA) for 3-phase AC motor • at 480 V rated value 65 A • at 600 V rated value 52 A • yielded mechanical performance [hp] 65 A • for single-phase AC motor 5 hp • at 230 V rated value 10 hp • for 3-phase AC motor 20 hp • at 200/208 V rated value 20 hp • for 3-phase AC motor 20 hp • at 200/209 V rated value 20 hp • at 200/209 V rated value 20 hp • at 460/480 V rated value 50 hp • at 575/5600 V rated value 60 hp • for short-circuit protection 6600 / P600 C characteristic: 10 A; 0.4 kA	• at 24 V rated value	10 A
• at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 200 V rated value • at 200 V rated value • at 600 V rated value • at 840 V rated value • at 600 V rated value • at 100 V rated value • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • at 220/230 V rated value • at 220/230 V rated value — at 200/208 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 60 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary contact in circuit — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required Installation/mounting/dimensions mounting position 14/180° rotation possible on vertical mounting surface; can be tilted forward abackward by +/- 22.5° on vertical mounting surface; fastening method assert and snap-on mounting onto 35 mm DIN rail according to DIN EN 6074 height	• at 48 V rated value	2 A
e at 125 V rated value e at 220 V rated value 0.3 A 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value 5 A 25 A 26 A 26 To single-phase AC motor — at 1101/20 V rated value 9 5 A 27 A 1101/20 V rated value 9 6 S A 28 A 29 Vielded mechanical performance [hp] e for single-phase AC motor — at 1101/20 V rated value 9 6 S A 20 V rated value 9 10 hp 10 h	at 60 V rated value	2 A
at 220 V rated value at 600 V rated value Contact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value before single-phase AC motor - at 100 V rated value - at 200 V rated value - at 230 V rated value - at 230 V rated value - at 230 V rated value - at 200/208 V rated value - at 220/230 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 4575/600 V rated value - at 575/600 V rated value - at 4575/600 V rated value - at 575/600 V rated value - at 600/4800 V rated v	 at 110 V rated value 	1 A
e at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value e at 600 V rated value e at 600 V rated value e for single-phase AC motor — at 110/120 V rated value e for 3-phase AC motor — at 230 V rated value e for 3-phase AC motor — at 220/230 V rated value e for 3-phase AC motor — at 220/230 V rated value e for 3-phase AC motor — at 220/230 V rated value e for 3-phase AC motor — at 270/208 V rated value e at 270/208 V rated value e for 3-phase AC motor — at 270/208 V rated value e 50 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the miniature circuit breaker for short-circuit protection of the miniature circuit breaker for short-circuit protection of the miniature circuit protection of the main circuit — with type of coordination 1 required with type of coordination 2 required gG: 250 A (690 V, 100 kA), aM: 60 A (690 V, 100 kA), BS88: 200 A (415 V, 8A) with type of coordination 2 required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 8A) with type of coordination 2 required ackward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface, can be tilted forward a backward by +/- 22.5° on vertical mounting surface.	 at 125 V rated value 	0.9 A
Contact reliability of auxiliary contacts ### UL/CSA ratings full-load current (FLA) for 3-phase AC motor eat 480 V rated value	 at 220 V rated value 	0.3 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value	 at 600 V rated value 	0.1 A
### data of the value of the va	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
at 480 V rated value at 600 V rated value 52 A ylelded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 5 hp — at 230 V rated value 10 hp • for 3-phase AC motor — at 200/208 V rated value 20 hp — at 220/203 V rated value 20 hp — at 460/480 V rated value 5 hp — at 75/600 V rated value 5 hp — at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the main circuit — with type of coordination 2 required 9G: 125 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, kA) • for short-circuit protection of the auxiliary switch required 9G: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, kA) • for short-circuit protection of the auxiliary switch required 9G: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position 4-/180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting 9cs wand snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height	JL/CSA ratings	
• at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 5 hp — at 230 V rated value 10 hp • for 3-phase AC motor — at 200/208 V rated value 20 hp — at 220/230 V rated value 20 hp — at 4460/480 V rated value 30 hp — at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 4	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 10 hp • for 3-phase AC motor — at 200/208 V rated value 20 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 20 hp — at 4575/600 V rated value 50 hp — at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 8 kA) • for short-circuit protection of the auxiliary switch required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 8 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward of backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting Yes fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height	 at 480 V rated value 	65 A
• for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — of for 3-phase AC motor — at 220/208 V rated value — at 220/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — of the ministure circuit protection design of the ministure circuit breaker for short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary contain of the main circuit — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 8kA) • for short-circuit protection of the auxiliary switch required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 8kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting festening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height	at 600 V rated value	52 A
- at 110/120 V rated value 5 hp 10 hp - at 230 V rated value 10 hp • for 3-phase AC motor - at 220/230 V rated value 20 hp - at 220/230 V rated value 20 hp - at 220/230 V rated value 50 hp - at 575/600 V rated value 50 hp - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit protection of the auxiliary circuit protection of the miniature circuit protection of the main circuit - with type of coordination 1 required	yielded mechanical performance [hp]	
- at 230 V rated value • for 3-phase AC motor - at 200/208 V rated value 20 hp - at 220/230 V rated value 20 hp - at 460/480 V rated value 50 hp - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of coordination 2 required • for short-circuit protection of the auxiliary switch required gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 8 kA) - with type of coordination 2 required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 8 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method height 114 mm	 for single-phase AC motor 	
• for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 675/600 V rated value Contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 2 required — with type of coordination 2 required — with type of coordination 2 required — of or short-circuit protection of the auxiliary switch required of the auxiliary force of the fuse link • for short-circuit protection of the auxiliary switch required of the fuse link • for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required of the fuse link • for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required according to Diny En 6071 fastening method height 114 mm	— at 110/120 V rated value	5 hp
- at 200/208 V rated value 20 hp - at 220/230 V rated value 50 hp - at 460/480 V rated value 50 hp - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, kA) • with type of coordination 2 required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward a backward by +/- 22.5° on vertical mounting surface; can be filted forward and shap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height	— at 230 V rated value	10 hp
- at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of coordination 2 required • for short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the shor	• for 3-phase AC motor	
- at 460/480 V rated value - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required with type of coordination 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of the auxiliary switch required of the short-circuit protection of th	 at 200/208 V rated value 	20 hp
- at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, kA) • with type of coordination 2 required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position	— at 220/230 V rated value	20 hp
contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position #/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting Yes fastening method height ### M600 / P600 C characteristic: 10 A; 0.4 kA Geovernment of the main circuit protection of the main circuit protection of the main circuit — with type of coordination 1 required gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA) For short-circuit protection of the auxiliary switch required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 80 kA) For short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions ###################################	— at 460/480 V rated value	
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required •		
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required protection of the auxiliary switch required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 8 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions ##-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting fastening method height C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA C characteristic: 10 A; 0.4 kA ## C characteristic: 10 A; 0.4 kA ## C characteri		A600 / P600
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of coordination 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required gG: 125 A (690 V, 100 kA), aM: 63 A (690 V, 100 kA), BS88: 100 A (415 V, 8 kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting Yes fastening method height 114 mm		
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— with type of coordination 1 required — with type of coordination 2 required — with type of coordination 1 required — with type of coordination 2 required — wit	-	
with type of coordination 2 required Graph of protection of the auxiliary switch required For short-circuit protection of the auxiliary switch required Graph of protection of the auxiliary switch required		
of for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting yes fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height 114 mm		
Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height 114 mm		
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward a backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height 114 mm	<u>.</u>	gG: 10 A (500 V, 1 kA)
backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071 height height	nstallation/ mounting/ dimensions	
fastening methodscrew and snap-on mounting onto 35 mm DIN rail according to DIN EN 6071height114 mm		
height 114 mm	fastening method side-by-side mounting	Yes
•	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
width 55 mm	height	114 mm
	width	55 mm

 — upwards — downwards — at the side • for grounded parts — forwards — upwards 	10 mm 10 mm 10 mm 0 mm 10 mm 10 mm
 — forwards — upwards — downwards — at the side ● for grounded parts — forwards — upwards 	10 mm 10 mm 0 mm 10 mm 10 mm
 — upwards — downwards — at the side • for grounded parts — forwards — upwards 	10 mm 10 mm 0 mm 10 mm 10 mm
— downwards 1 — at the side 0 • for grounded parts — forwards 1 — upwards 1	10 mm 0 mm 10 mm 10 mm
 — at the side ● for grounded parts — forwards — upwards 1 	0 mm 10 mm 10 mm
 for grounded parts forwards upwards 1 	10 mm 10 mm
— forwards 1 — upwards 1	10 mm
— upwards	10 mm
·	
— at the side	6 mm
— downwards 1	10 mm
for live parts	
— forwards 1	10 mm
— upwards 1	10 mm
— downwards	10 mm
	6 mm
Connections/ Terminals	
type of electrical connection	
	screw-type terminals
·	spring-loaded terminals
·	Spring-type terminals
·	Spring-type terminals
type of connectable conductor cross-sections	
for main contacts — solid or stranded 2	2x (1 35 mm²), 1x (1 50 mm²)
	2x (1 35 mm²), 1x (1 30 mm²) 2x (1 25 mm²), 1x (1 35 mm²)
	2x (1 2), 1x (1 33 mm)
connectable conductor cross-section for main contacts	2/ (10 2), 1/ (10 1)
	1 35 mm²
connectable conductor cross-section for auxiliary contacts	
•	0.5 2.5 mm²
	0.5 1.5 mm²
	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 2.5 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²)
— finely stranded without core end processing	2x (0.5 2.5 mm²)
• for AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section for main contacts	18 1
AWG number as coded connectable conductor cross section for auxiliary contacts	20 14
Safety related data	
product function	
• mirror contact according to IEC 60947-4-1	Yes
 positively driven operation according to IEC 60947-5-1 	No
	Yes
	Yes
	20 a
,	Yes
proportion of dangerous failures	40.07
5	40 %
	73 % 1 000 000
	100 FIT
ISO 13849	
	3
7.	Yes

IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

General Product Approval









<u>Miscellaneous</u> <u>KC</u>

General Product Approval

EMV

Test Certificates

Maritime application





Special Test Certificate

Type Test Certificates/Test Report





Maritime application













other

other Railway Environment

Confirmation

Confirmation

Special Test Certificate



Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information for data generation and storage

https://support.industry.siemens.com/cs/ww/en/view/109995012

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2037-3NB30

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2037-3NB30}$

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NB30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

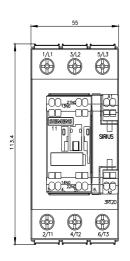
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2037-3NB30&lang=en

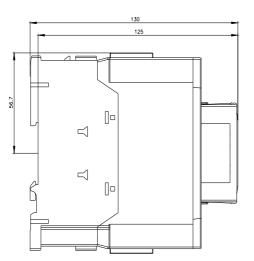
Characteristic: Tripping characteristics, I2t, Let-through current

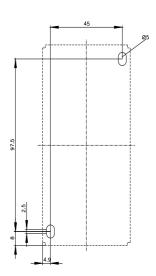
https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NB30/char

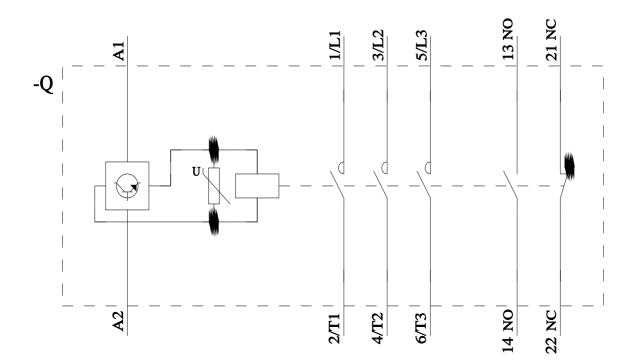
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3NB30&objecttype=14&gridview=view1









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9/5/2025

